What is Claimed

1. Apparatus for adjusting the position of a line of light in barcode space that includes

a support frame having a rear housing containing a solid state imager,

an imaging lens supported in said frame for focusing an image of a target in barcode space along a linear optical axis, upon the solid state imager,

an illumination means supported in said frame for projecting a line of light upon a target in barcode space,

said illumination means including at least one cylindrical illumination lens element having a plano light entrance face that is mounted adjacent a light source, said light source being in coplanar alignment with said imagin g lens and being perpendicular to said optical axis, and including a semi-circular light emitting face,

a field stop aperture positioned between the light source and the illumination lens for producing a line of light in barcode space, and

adjusting means for positioning the light entrance face of the illumination lens in relation to said light source so that the line of light can be selectively positioned in barcode space, said adjusting means further including an arcuate shape recess formed in said cylindrical lens that is arranged to ride in contact with at least one cam mounted in said frame.

2. The apparatus of claim 1, wherein said illumination means further includes said field stop aperture positioned between the light source and the illumination lens element for producing a line of light in barcode space.

3. The apparatus of claim 2, wherein said cylindrical lens element has a arcuate shaped recess formed therein that is arranged to ride in contact with a cam mounted upon said frame.

4. The apparatus of claim 1, wherein the arcuate shaped recess formed in the cylindrical lens element has a center of curvature that is coincidental with the center of curvature of the semi-circular light emitting face of the illumination lens element.

5. The apparatus of claim 1, wherein said light source further includes a plurality of light emitting diodes.

6. The apparatus of claim 1, wherein said illumination lens element further includes a single axis diffuser mounted at the plano light entrance face.

7. Apparatus for adjusting the position of a line of light in barcode space that includes

a support frame having a rear housing containing a solid state imager and a pair of arms extending forwardly from the housing,

an imaging lens mounted between the arms for focusing an image of a target in barcode space along a linear optical path onto said solid state imager,

illumination means mounted upon said frame containing a plurality of light emitting diodes located on either side of said imaging lens in coplanar alignment with said imaging lens and being perpendicular to said optical path for illuminating a target in barcode space,

an elongated optical element that contains a pair of spaced apart cylindrical illumination lenses said illumination lenses being located on either side of the optical path between the light emitting diodes and the target, each illumination lens containing a rear plano light entrance surface and semi-circular light exit face, said optical element having a central opening that passes through said optical path wherein a light image of said target passes through said opening

each of said arms contains an arcuate camming surface at its distal end that is adapted to ride in a complementary recess formed in the optical element,

a field stop mounted between the said light emitting diodes and the optical element for producing a line of light in barcode space, and

adjusting means for rotatably positioning said optical element about its axis to adjust the position of the line of light in barcode space.

8. The apparatus of claim 7, wherein said optical element contains a central opening for permitting a light image of said target moving along the optical path to pass therethrough.

9. The apparatus of claim 8, wherein the distal end of each arm contains an arcuate camming surface at its distal end, each camming surface being adapted to ride in a complementary recess formed in the optical element.

10. The apparatus of claim 7, whereby the arcuate shaped recess has a center of curvature that is coincidental with the center of curvature of the light exit face of the optical illumination element.

11. The apparatus of claim 10, wherein the camming surfaces each lie in a plane that is generally parallel with the optical path.

12. The apparatus of claim 11, that further includes means for securing the optical element to the frame arms in a desired position with respect to the optical path.

13. The apparatus of claim 12, wherein the means for securing the optical element to the frame arms includes one or more ultrasonic welds.